



NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL

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July 14, 2008

The Honorable Kevin J. Martin  
Chairman of the  
Federal Communications Commission  
Washington, D.C. 20554

Re: Two Way Paging Communications  
For Public Safety Communications

Dear Chairman Martin:

Private two-way digital paging has emerged as an important technology in strengthening emergency preparedness. The Commission's extensive work examining Hurricane Katrina and other catastrophic events indicate that effort should be directed to expanding two-way paging opportunities for public safety. On behalf of the National Public Safety Telecommunications Council (NPSTC), this letter urges the Commission to examine the availability of channels in the 901-902/930-931/940-941 MHz band where the Commission has granted geographic licenses in the Narrowband PCS auctions and determine whether capacity can be made available to public safety agencies. This information will afford the Commission, public safety agencies and current licensees opportunity to broaden use of this spectrum by assisting emergency response.

### **The Critical Role of Two Way Paging in the 901-902/930-931/940-941 MHz Band**

Allocating paging channels in the 900 MHz band to public safety was a primary recommendation of the Commission's Independent Panel addressing Hurricane Katrina.<sup>1</sup> Paging systems, possessing inherent redundancy, are more reliable than voice/cellular systems. Significant efficiency is gained by group pages transmitting critical information to alert thousands of units at the same time. Cost factors are another notable benefit. The Commission recognized the validity of the Independent Panel's recommendation by committing the Public Safety and Homeland Security

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<sup>1</sup> Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks Report and Recommendations to the Federal Communications Commission, at paragraph 5, page 10, In the Matter of Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks, *Notice of Proposed Rulemaking*, FCC 06-83, EB Docket No. 06-119 (June 19, 2006).

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American Association of State Highway and Transportation Officials | American Radio Relay League | Association of Fish and Wildlife Agencies | Association of Public Safety Communications Officials | Forestry Conservation Communications Association | International Association of Chiefs of Police | International Association of Emergency Managers | International Association of Fire Chiefs | International Municipal Signal Association | National Association of State Chief Information Officers | National Association of State Emergency Medical Services Officials | National Association of State Foresters | National Association of State Technology Directors | National Emergency Number Association | National Sheriffs' Association

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Bureau and Wireless Telecommunications Bureau to review and act upon the recommendation.<sup>2</sup> NPSTC recommends that the Bureaus' review focus on means to make channels in the 901-902/930-931/940-941 MHz band directly accessible by public safety.

Two-way paging systems provide a core means to communicate immediately between large numbers of first responders and dispatch. With message acknowledgement and other standard features, two-way paging affords the ability to know when recipient pagers receive a message, when users read the message and the reply and status of the users. The small, discrete and inexpensive character of paging devices presents one of the most affordable communications means for public safety. This capability is of enormous importance to the fire service, where many fire fighters are volunteers and must be dispatched from wide geographic areas to an incident in a cost effective manner.

Only two-way pagers provide acknowledged alerting capabilities at price points suited for public safety. Small belt-worn devices with long battery life, group alerting features and high-power simulcast coverage combine to provide capabilities not possible with other technologies within these cost parameters. Numerous vendors provide commercial off-the-shelf two-way pagers and network equipment at competitive pricing. Available products range from consumer-grade messaging units to deployable systems specifically designed for public safety.

More particularly, in the 900 MHz band, the only protocol implemented in the band is two-way ReFLEX paging, which presents several efficiencies. The benefits of this protocol include simulcast digital paging and feedback as responders receive, read and reply to messages. The protocol includes ability to send/receive pages and email. Users can roam between networks by scanning control channels, providing a core level of interoperability. Subscriber devices, as well as the infrastructure are relatively inexpensive. The great challenge is public safety's lack of access to the band.

### **Commercial Two Way Paging Is Not a Viable Alternative**

Several commercial paging carriers offer two-way paging service in the 900MHz band, although the extent of build out/coverage is not clear. More fundamentally, these services do not meet the mission critical communications requirements of public safety. The standards of performance, redundancy and diversity of networks in the public safety service and those of commercial operations, including paging, remain substantially different.

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<sup>2</sup> In the Matter of Recommendations of the Independent Panel Reviewing the Impact of Hurricane Katrina on Communications Networks Report and Recommendations to the Federal Communications Commission, *Order* at paragraph 101, EB 06-119, WC 06-63, FCC 07-107 (June 8, 2007).

The National Fire Protection Association (NFPA) has published a standard addressing the installation, performance, operation, and maintenance of public emergency services communications systems and facilities. The *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems* states:

*8.4.2.1 The paging system shall be under the direct control of the authority having jurisdiction where used as a method of emergency dispatch<sup>3</sup>*

Several considerations support this standard. The emergency nature of the public safety operations demand that messages be delivered immediately, in the order of seconds. While achievable with dedicated, private systems, commercial two-way paging service has a built-in delay of at least a minute before messages can be delivered. Additionally, commercial networks do not currently offer an acknowledgement feature for group messaging that is available in private systems. To receive message acknowledgement, group members must be signaled sequentially, one at a time, an unrealistic circumstance for even medium level public safety deployments. Commercial two-way paging systems also have significant coverage gaps. The Commission's commitment to public safety communications has led to tangible improvements. The National Public Safety Telecommunications Council urges the Commission to continue these efforts by pursuing a means to afford agencies access to two-way paging in the 901-902/930-931/940-941 MHz band.

A copy of this letter shall be filed in Dockets EB-06-119 and WC 06-63.

Respectfully,



Ralph Haller, Chair  
National Public Safety Telecommunications Council

Copy Provided to:

The Honorable Michael J. Copps  
The Honorable Jonathan S. Adelstein  
The Honorable Deborah Taylor Tate  
The Honorable Robert M. McDowell  
Chief Derek Poarch, Public Safety and Homeland Security Bureau  
Fred Campbell, Chief, Wireless Telecommunications Bureau  
Ms. Erika Olsen, Deputy Chief, Public Safety and Homeland Security Bureau  
Mr. Jeff Cohen, Senior Legal Counsel, Public Safety and Homeland Security Bureau

<sup>3</sup> NFPA-1221, 2002 edition, at 1221-23 section 8.4.2.1